CONSTRUCTION AND MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

Purina Mills, Inc. 346 West 1350 N, Milford, IN 46542

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 085-14327-00021	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: September 14, 2001

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary animal feed manufacturing operation.

Authorized Individual: Paul Luther

Source Address: 346 West 1350 N, Milford, IN 46542

Mailing Address: P.O. Box 66812, St. Louis, MO 63166-6812

Phone Number: 314-768-4630

SIC Code: 2048 County Location: Kosciusko

County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit;

Minor Source Operating Permit;

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Receiving and Bin Loading Operation, identified as ID1 and ID2, with a maximum capacity of 50 tons per hour of feed ingredients per hour, and exhausting fugitively to the atmosphere.
- (b) Hammermill Operation, identified as ID3, with a maximum capacity of 35 tons per hour of grain per hour, using a cyclone as control, and exhausting to stack 3.
- (c) One (1) micro room, identified as ID3, with a maximum capacity of 0.5 tons per hour of micro ingredients, using a cyclone and baghouse as control, and exhausting to stack 3.
- (d) Grain Cleaning operation, identified as ID5, with a maximum capacity of 25 tons per hour of grain, using a filter as particulate control, and exhausting to stack 5.
- (e) Pellet Cooler Operation, identified as ID6, with a maximum capacity of 25 tons per hour of pelleted feed per hour, using a cyclone as control, and exhausting to stack 6.
- (f) Bulk Loadout Operation, identified as ID7, with a maximum capacity of 60 tons per hour of finished feed per hour, and exhausting fugitively to the atmosphere.
- (g) Packing Operation, identified as ID8, with a maximum capacity of 12 tons per hour of finished feed per hour, using a baghouse as control, and exhausting to stack 8.
- (h) One (1) natural gas fired boiler, with a maximum rated heat input of 6.3 million British thermal units per hour (MMBtu/hr), identified as B1, and exhausting to stack B1.

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SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

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(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

B.7 Permit Term [326 IAC 2-6.1-7]

This permit is issued for a fixed term of five (5) years form the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.
- (c) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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> Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

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no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.12 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

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- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.13 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

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(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.15 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;

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- (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
 - (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
 - (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (b) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (d) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.17 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

- (a) Receiving and Bin Loading Operation, identified as ID1 and ID2, with a maximum capacity of 50 tons per hour of feed ingredients per hour, and exhausting fugitively to the atmosphere.
- (b) Hammermill Operation, identified as ID3, with a maximum capacity of 35 tons per hour of grain per hour, using a cyclone as control, and exhausting to stack 3.
- (c) One (1) micro room, identified as ID3, with a maximum capacity of 0.5 tons per hour of micro ingredients, using a cyclone and baghouse as control, and exhausting to stack 3.
- (d) Grain Cleaning operation, identified as ID5, with a maximum capacity of 25 tons per hour of grain, using a filter as particulate control, and exhausting to stack 5.
- (e) Pellet Cooler Operation, identified as ID6, with a maximum capacity of 25 tons per hour of pelleted feed per hour, using a cyclone as control, and exhausting to stack 6.
- (f) Bulk Loadout Operation, identified as ID7, with a maximum capacity of 60 tons per hour of finished feed per hour, and exhausting fugitively to the atmosphere.
- (g) Packing Operation, identified as ID8, with a maximum capacity of 12 tons per hour of finished feed per hour, using a baghouse as control, and exhausting to stack 8.
- (h) One (1) natural gas fired boiler, with a maximum rated heat input of 6.3 million British thermal units per hour (MMBtu/hr), identified as B1, and exhausting to stack B1.

Emission Limitations and Standards

D.1.1 Particulate Matter (PM) [326 IAC 6-3]

326 IAC 6-3-2 (Process Operations)

(a) The particulate matter (PM) from the Receiving and Bin Loading Operation, Bulk Loadout Operation, and the Hammermill Operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

The allowable emissions for each facility are as follows:

Emission Unit	Process Weight Rate (tons/hr)	PM Emissions (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Receiving and Bin Loading Operation	50.00	13.36	44.58
Bulk Loadout Operation	60.00	0.87	46.29
Hammermill Operation	35.00	10.27	41.32

The cyclone shall be in operation at all times the hammermill is in operation, in order to comply with this limit.

(b) Pursuant to CP 085-2792-00021, issued on June 15, 1993, the particulate matter (PM) from the Pellet Cooler Operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 \ P^{0.67}$$
 where $E = \text{rate of emission in pounds per hour}$ and $P = \text{process weight rate in tons per hour}$

$$E = 4.10 P^{0.67}$$
 where $E = 35.43$ pounds per hour $P = 25$ tons per hour

The cyclone shall be in operation at all times the Pellet Cooler Operation is in operation, in order to comply with this limit.

(c) Pursuant to CP 085-2792-00021, issued on June 15, 1993, the particulate matter (PM) from the Micro Room, Grain Cleaning operation and the Packing Operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

The allowable emissions for each facility are as follows:

Emission Unit	Process Weight Rate (tons/hr)	PM Emissions (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Micro Room	0.50	0.01	2.58
Grain Cleaning Operation	25.00	8.21	35.43
Packing Operation	12.00	0.17	21.67

(d) Pursuant to 326 IAC 2-2, the particulate matter emissions shall be limited as follows:

Process	Pounds Per Ton
Receiving and Bin Loading	0.220
Bulk Loadout	0.190
Hammermill	0.300
Pellet Cooler	0.350
Micro Room	1.250
Grain Cleaning	0.350
Packing	0.450

This will limit the PM emissions to less than 249.8 tons per year. Therefore, 326 IAC 2-2 will not apply.

(e) Pursuant to 326 IAC 2-1.1-5(a), the particulate matter less than 10 microns (PM-10) shall be limited as follows:

Process	Pounds Per Ton
Receiving and Bin Loading	0.030
Bulk Loadout	0.030
Hammermill	0.150
Pellet Cooler	0.175
Micro Room	0.300
Grain Cleaning	0.090
Packing	0.300

[`]This will limit the PM10 emissions to less than 100 tons per year.

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.3 Particulate Matter (PM)

The cyclone for PM control shall be in operation at all times when the Hammermill Operation, identified as ID3, and the Pellet Cooler Operation are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

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D.1.4 Visible Emissions Notations

(a) Daily visible emission notations of the Hammermill Operation, identified as ID3, and the Pellet Cooler Operation stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the cyclones used in conjunction with the Hammermill Operation, identified as ID3, and the Pellet Cooler Operation, identified as ID6, at least once daily when the Hammermill Operation, identified as ID3, and the Pellet Cooler Operation is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the air flow rate in the cyclones shall be maintained at a minimum of 3,800 and 24,000 actual cubic feet per minute, respectively, or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the Hammermill Operation, identified as ID3, and the Pellet Cooler Operation, identified as ID6 stack exhaust.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Air flow rate in the cyclones
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

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(4) Quality Assurance/Quality Control (QA/QC) procedures.

- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Purina Mills, Inc.
Address:	346 West 1350 N
City:	Milford, IN 46542
Phone #:	314-768-4630
MSOP #:	085-14327-00021
hereby certify that Pu	urina Mills, Inc. is 9 still in operation. 9 no longer in operation.
	urina Mills, Inc. is ompliance with the requirements of MSOP 085-14327-00021. in compliance with the requirements of MSOP 085-14327-00021.
Authorized Individu	al (typed):
Title:	
Signature:	
Date:	
	ons or requirements for which the source is not in compliance, provide a narrative source did or will achieve compliance and the date compliance was, or will be
Noncompliance:	

*SEE PAGE 2

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.	
THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TO PARTICULATE MATTER?, 25 TONS/YEAR SULFUR DIOXIDE?, 25 TONS/YEAR NITROGEN OF 25 TONS/YEAR VOC?, 25 TONS/YEAR HYDROGEN SULFIDE?, 25 TONS/YEAR TOTAL REDUCTED SULFUR COMPOUNDS?, 25 TONS/YEAR FLUORIDES?, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT?, 25 TONSCOMBINATION HAZARDOUS AIR POLLUTANT?, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED BELEMENTAL LEAD?, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2)? EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESSION APPLICABLE LIMITATION	XIDES?, CED SULFUR 00TONS/YEAR IS/YEAR ANY JRED AS M
THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC OR, PERMIT CONDITION # PERMIT LIMIT OF	_ AND/OR
THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y	N
THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT?	Y N
COMPANY:PHONE NO. ()	
COMPANY:PHONE NO. () LOCATION: (CITY AND COUNTY) PERMIT NOAFS PLANT ID:AFS POINT ID:IN CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:	SP:
DATE/TIME MALFUNCTION STARTED:// 20	
TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION:	
MEASURES TAKEN TO MINIMIZE EMISSIONS:	
REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS: CONTINUED OPERATION REQUIRED TO PROVIDE <u>ESSENTIAL</u> * SERVICES:	
MALFUNCTION REPORTED BY:TITLE:	
MALFUNCTION RECORDED BY:DATE:TIME:	

PAGE 1 OF 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*Essential services are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Mail to: Permit Administration & Development Section
Office Of Air Quality
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Purina Mills, Inc. P.O. Box 66812 St. Louis, MO 63166-6812

Affidavit of Construction

I,	,	being duly swo	orn upon my oath, de	epose and say:	
(Name	of the Authorized Representative)				
1.	I live in	c	County, Indiana and I	being of sound mine	d and over twenty-one
	(21) years of age, I am competent	to give this affi	davit.		
2.	I hold the position of(7		for		<u>_</u> .
	(7	Γitle)		(Company N	ame)
3.	By virtue of my position with		(Company Name)	,I have personal	
	knowledge of the representations	contained in thi	s affidavit and am ai	uthorized to make	
	these representations on behalf of		(Compai	ny Name)	<u>.</u>
4.	I hereby certify that Purina Mills, Ir				onstruction of the Grain
	Cleaning operation on		in conformity with th	ne requirements and	d intent of the
	construction permit application rec	eived by the Of	ffice of Air Quality or	n May 7, 2001 and	as permitted pursuant
	to MSOP No. 085-14327, Plant ID	No. 085-0002	1 issued on		<u> </u>
Further Affiant sall affirm under peand belief.	aid not. nalties of perjury that the represent	ations contain	ed in this affidavit a	are true, to the bes	t of my information
		Signatur	·e		
		Date			
STATE OF INDI	ANA))SS				
COUNTY OF)				
Subscr	ibed and sworn to me, a notary pub	olic in and for		Cou	unty and State of
Indiana on this	day of		, 20		
My Commission	expires:				
			Signature		
			Signature		
			Name (typed or p	orinted)	_

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Construction and Minor Source Operating Permit

Source Background and Description

Source Name: Purina Mills, Inc.

Source Location: 346 West 1350 N, Milford, IN 46542

County: Kosciusko SIC Code: 2048

Operation Permit No.: 085-14327-00021 Permit Reviewer: Phillip Ritz/EVP

The Office of Air Quality (OAQ) has reviewed an application from Purina Mills, Inc. relating to the construction and operation of an animal feed manufacturing operation.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Receiving and Bin Loading Operation, identified as ID1 and ID2, with a maximum capacity of 50 tons per hour of feed ingredients per hour, and exhausting fugitively to the atmosphere.
- (b) Hammermill Operation, identified as ID3, with a maximum capacity of 35 tons per hour of grain per hour, using a cyclone as control, and exhausting to stack 3.
- (c) One (1) micro room, identified as ID3, with a maximum capacity of 0.5 tons per hour of micro ingredients, using a cyclone and baghouse as control, and exhausting to stack 3.
- (d) Pellet Cooler Operation, identified as ID6, with a maximum capacity of 25 tons per hour of pelleted feed per hour, using a cyclone as control, and exhausting to stack 6.
- (e) Bulk Loadout Operation, identified as ID7, with a maximum capacity of 60 tons per hour of finished feed per hour, and exhausting fugitively to the atmosphere.
- (f) Packing Operation, identified as ID8, with a maximum capacity of 12 tons per hour of finished feed per hour, using a baghouse as control, and exhausting to stack 8.
- (g) One (1) natural gas-fired boiler, with a maximum rated heat input of 6.3 million British thermal units per hour (MMBtu/hr), identified as B1, and exhausting to stack B1.

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Purina Mills, Inc. Milford, Indiana Permit Reviewer: PR/EVP

New Emission Units and Pollution Control Equipment

The source also consists of the following new facilities/units:

(a) Grain Cleaning operation, identified as ID5, with a maximum capacity of 25 tons per hour of grain, using a filter as particulate control, and exhausting to stack 5.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP (43) 1473, issued on September 23, 1980;
- (b) 43-02-85-0183, issued on March 2, 1981;
- (c) 085-2792, issued on June 15, 1993; and
- (d) 085-3423, issued on April 11, 1994.

All conditions from previous approvals were incorporated into this permit except the following:

(a) CP (43) 1473, issued on September 23, 1980:

Condition 7: That emissions of particulate matter shall be limited to .005 gains per cubic foot, .08 pounds per hour, and 2 tons per year.

Reason not incorporated: The pellet cooler was reconstructed per 085-2792, issued on June 15, 1993.

(b) 43-02-85-0183, issued on March 2, 1981:

Condition 5: That particulate matter emissions shall be limited to: 0.016 grains per dry standard cubic foot, 2.4 pounds per hour, and 6.3 tons per year.

Reason not incorporated: The pellet cooler was reconstructed per 085-2792, issued on June 15, 1993.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
5	Grain cleaner	113	1.33 Square	6500	Ambient

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

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Purina Mills, Inc. Milford, Indiana Permit Reviewer: PR/EVP

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 7, 2001, with additional information received on July 6, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 3.)

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	43.45
PM-10	16.96
SO ₂	0.02
VOC	0.15
СО	2.32
NO _x	2.76
Any Single HAP	0.00
Total HAPs	0.00

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.

County Attainment Status

The source is located in Kosciusko County.

Pollutant	Status		
PM-10	attainment		
SO ₂	attainment		
NO_2	attainment		
Ozone	attainment		
СО	attainment		
Lead	attainment		

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Kosciusko County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD),

326 IAC 2-2 and 40 CFR 52.21.

(b) Kosciusko County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Potential To Emit (tons/year)
PM	43.45
PM-10	16.96
SO ₂	0.02
VOC	0.15
CO	2.32
NO _x	2.76

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the controlled potential emissions as the latest available annual source emissions report was submitted in 1990.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	8.21	2.05	0.00	0.00	0.00	0.00
PSD or Offset Threshold Level	250	250	250	250	250	250

- (a) This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 25 tons per year and equal to or greater than five (5) tons per year of particulate matter. Therefore, the source is subject to the provisions of 326 IAC 2-6.1-6(g).

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit MSOP085-14327-00021, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified

by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.300, Subpart DD, Standards of Performance for Grain Elevators), as the subpart specifically exempts animal food manufacturing operations.
- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), this source is not considered a major source because it has the potential to emit less than 250 tons per year of any criteria pollutant and it is not one of the 28 listed source categories. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Kosciusko County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this animal feed manufacturing operation does not have the potential to emit HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-3-2 (Process Operations)

(a) The particulate matter (PM) from the Receiving and Bin Loading Operation, Bulk Loadout Operation, and the Hammermill Operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

The allowable emissions for each facility are as follows:

Hammermill Operation

Emission Unit Process PM Emissions Allowable PM Weight Rate (lb/hr) **Emissions** (tons/hr) (326 IAC 6-3-2) (lb/hr) 50.00 7.44 44.58 Receiving and Bin Loading Operation **Bulk Loadout Operation** 60.00 0.87 46.29 35.00 10.27 41.32

The cyclone shall be in operation at all times the Hammermill is in operation, in order to comply with this limit.

(b) Pursuant to CP 085-2792-00021, issued on June 15, 1993, the particulate matter (PM) from the Pellet Cooler Operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

 $E = 4.10 P^{0.67}$ where E = 35.43 pounds per hour P = 25 tons per hour

The cyclone shall be in operation at all times the Pellet Cooler Operation is in operation, in order to comply with this limit.

(c) Pursuant to CP 085-2792-00021, issued on June 15, 1993, the particulate matter (PM) from the Micro Room, Grain Cleaning operation and the Packing Operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E =rate of emission in pounds per hour and P = process weight rate in tons per hour

The allowable emissions for each facility are as follows:

Emission Unit	Process Weight Rate (tons/hr)	PM Emissions (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
Micro Room	0.50	0.01	2.58
Grain Cleaning Operation	25.00	8.21	35.43
Packing Operation	12.00	0.17	21.67

326 IAC 8-1-6 (General Volatile Organic Compound Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, and which have potential volatile organic compound (VOC) emissions of 25 tons per year or more. This source has no facilities with potential VOC emissions at, or in excess of 25 tons per year; therefore, this rule does not apply.

Purina Mills, Inc.

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Permit Reviewer: PR/EVP

Conclusion

The operation of this animal feed manufacturing operation shall be subject to the conditions of the attached proposed **Minor Source Operating Permit 085-14327-00021**.

Appendix A: Emission Calculations

Company Name: Purina Mills, Inc.

Address City IN Zip: 346 West 1350 N, Milford, IN 46542

CP: 085-14327-00021
 Reviewer: Phillip Ritz/EVP
 Date: March 11, 2001

Emissions Generating Activity							
Pollutant	Natural Gas Combustion	Feed Mill Process Operations	TOTAL				
PM	0.05	43.40	43.45				
PM10	0.21	16.75	16.96				
SO2	0.02	0.00	0.02				
NOx	2.76	0.00	2.76				
VOC	0.15	0.00	0.15				
co	2.32	0.00	2.32				
total HAPs	0.00	0.00	0.00				
worst case single HAP	0.00	0.00	0.00				

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

Pollutant	Natural Gas	Feed Mill Process	TOTAL	
	Combustion	Operations		
PM	0.05	43.40	4	
PM10	0.21	16.75	1	
SO2	0.02	0.00		
NOx	2.76	0.00		
VOC	0.15	0.00		
CO	2.32	0.00		
total HAPs	0.00	0.00		
worst case single HAP	0.00	0.00		

Appendix A: Process Particulate Emissions

Company Name: Purina Mills, Inc.

Address City IN Zip: 346 West 1350 N, Milford, IN 46542

CP: 085-14327-00021

Reviewer: Phillip Ritz/EVP

Date: March 11, 2001

				PM	PM-10	PM	PM-10	
	Process		PM-10	Emissions	Emissions	Emissions	Emissions	
	Rate	PM Emission	Emission	Pounds Per	Pounds Per	Tons Per	Tons Per	
Process	tons/hour	Factor	Factor	Year	Year	Year	Year	SCC
Receiving	50	1.70E-02	2.50E-03	7,446.00	1,095.00	3.72	0.55	3-02-008-02
Bin Loading	50	1.70E-02	2.50E-03	7,446.00	1,095.00	3.72	0.55	3-02-008-02
Hammermill	35	6.70E-02	3.35E-02	20,542.20	10,271.10	10.27	5.14	3-02-008-17
Micro Room/Bag								
Dump	0.5	3.30E-03	8.00E-04	14.45	3.50	0.01	0.00	3-02-008-03
Grain Cleaner	25	7.50E-02	1.88E-02	16,425.00	4,106.25	8.21	2.05	3-02-005-37
Pelleting	25	1.50E-01	7.50E-02	32,850.00	16,425.00	16.43	8.21	3-02-008-16
Bulk Shipping								
(Loadout)	60	3.30E-03	8.00E-04	1.734.48	420.48	0.87	0.21	3-02-008-03
Bagging				,				
(packing)	12	3.30E-03	8.00E-04	346.90	84.10	0.17	0.04	3-02-008-03
Total					• -	43.40	16.75	

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: Purina Mills, Inc.

Address City IN Zip: 346 West 1350 N, Milford, IN 46542

CP: 085-14327-00021

Reviewer: Phillip Ritz/EVP

Date: March 11, 2001

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

6.3 55.2

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.05	0.21	0.02	2.76	0.15	2.32

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32